one-eighth inch = one foot	one-quarter inch = one foot 0 4 8	three-eighths inch = one foot 0 4	one-half inch = one foot 0 4	three-quarter inch = one foot 0 2	one inch = one foot 6	one and one-half inch = one foot 2 6 0	three inches = one foot
	S/A SUPPLY AIR SCD SMOKE CONTROL DAMPER SD. SMOKE CONTROL DAMPER SD. SMOKE DAMPER SP. Gr. SPECIFIC GRAVITY SH STEAM HUMIDIFIER SPS STATIC PRESSURE SENSOR TSE TEMPERATURE SENSING ELEMENT UH UNIT VENTILATOR VCC VOLUMETRIC CONTROL CENTER VD VACIUME DAMPER (MANUAL OPPOSED BLADE) VFD VARIABLE FREQUENCY DRIVE VARIABLE SPEED MOTOR CONTROLLER WB WET BULB TEMPERATURE WATER FLOW MEASURING DEVICE WATER FLOW MEASURING STATION	O/A OUTDOOR AIR P PUMP PC PUMPED CONDENSATE PD PRESSURE DROP PEF PRESSURE DROP PREPILTER PFW PUMPED FEED WATER PFW PUMPED FEED WATER PGW PROPYLENE GLYCOL—WATER SOLUTION PH PREHEAT POD POWER OPERATED, OPPOSED BLADE DAMPER PRV PRESSURE REDUCING VALVE R/A RETURN AIR RH RECIPROCATING CHILLER UNIT RF RETURN FAN RH REHEAT COIL RH RELATIVE HUMIDITY	IFB INTEGRAL FACE AND BYPASS LPR LOW PRESSURE STEAM CONDENSATE RETURN LPS LOW PRESSURE STEAM LTCP LOCAL TEMPERATURE CONTROL PANEL LBS/HR POUNDS PER HOUR MB MIXING BOX MD MOTORIZED DAMPER MPR MEDIUM PRESSURE STEAM CONDENSATE RETURN MPS MEDIUM PRESSURE STEAM MAX. MAXIMUM MIN. MINIMUM NO NORMALLY OPEN NO NORMALLY OPEN	FC FLEXIBLE CONNECTION FCU FAN COIL UNIT FD FLOOR DRAIN FLR. FLOOR FLOOR F.DPR. FIRE DAMPER FS FLOOR SINK FTR FIN TUBE RADIATION GH GRAVITY HOOD HC HEATING COIL HE HEAT EXCHANGER HP HORSEPOWER HP HORSEPOWER HPR HIGH PRESSURE STEAM CONDENSATE RETURN HPS HIGH PRESSURE STEAM HPS HIGH PRESSURE STEAM HPS HYDRONIC RADIANT CEILING PANEL HV HEATING AND VENTILATING UNIT HWS HOT WATER SUPPLY IN-LINE CENTRIFUGAL FAN	DP DEWPOINT TEMPERATURE DX DIRECT EXPANSION E/A EXHAUST AIR EC EVAPORATIVE CONDENSER ECC ENGINEERING CONTROL CENTER EDH ELECTRIC COIL DUCT HEATER ENERGY EFFICIENCY RATIO EF EXHAUST FAN EGW ETHYLENE GLYCOL—WATER SOLUTION (% BY VOLUME) EMD END OF MAIN DRIP (STEAM) END ENERGY RECOVERY COIL ERP ELECTRIC RADIANT CEILING PANEL ET EXPANSION TANK EUH ELECTRIC UNIT HEATER EWC EVAPORATIVE WATER COOLER EXISTING EXISTING	CC COOLING COIL CD CEILING DIFFUSER CF CENTRIFUGAL FAN CG CEILING GRILLE CO CLEAN OUT COMP. COMPRESSOR CONV. CONVECTOR COTR. CONTRACT OFFICER TECHNICAL REPRESENTATIVE CP CONDENSING UNIT CUH CABINET UNIT HEATER CW COLD WATER DB DRY BULB TEMPERATURE DB DECIBELS DD DISCHARGE DAMPERS	ABBREVIATIONS AC AIR CONDITIONING UNIT ACC AIR COOLED CONDENSER ACCU AIR COOLED CONDSENSING UNIT ACRCU AIR COOLED RECIPROCATING CHILLER UNIT ACU ABSORPTION CHILLER UNIT AD ACCESS DOOR AFTER FILTER AFM AIR FLOW CONTROL VALVE AFM AIR FLOW MEASURING DEVICE AFW AIR FOIL WHEEL AHU AIR HANDLING UNIT AP ACCESS PANEL BD BACKDRAFT DAMPER BW BACKWARD INCLINED WHEEL BB BOTTOM GRILLE (WALL TYPE) BR BOTTOM REGISTER (WALL TYPE) CONVERTOR
GENERAL CONTRACTOR AND/OR ALL SUBCONTRACTORS SHALL FIELD VERIFY ALL DIMENS RESPONSIBLE FOR VARIATIONS BETWEEN PLAN DIMENSIONS AND ACTUAL FIELD DIMENS THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING PRIOR TO PROCE THE WORK WILL BE MADE WITHOUT THE PRIOR APPROVAL OF THE PROJECT ENGINEER. LI GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR GENERAL DEMOLITION INCLUDING FOR CEILING & FLOORS, ANY AND ALL CUTTING OF CONCRETE FLOORS, WALLS OR STRUCTURE OF RESPONSIBILITY. CORE DRILLING THROUGH CONCRETE WALLS, FLOORS OR STRUCTURE OF SUBCONTRACTOR, PATCHING THROUGH CONCRETE WALLS, FLOORS OR STRUCTURE OF SUBCONTRACTOR. PATCHING AND REPAIR OF CONCRETE WALLS, FLOOR, OR STRUCTURE OF THE SUBCONTRACTOR. PATCHING AND REPAIR OF CONCRETE WALLS, FLOOR, OR STRUCTURE OF THE SUBCONTRACTOR. THIS WILL BE ACCOMPLISHED UPON COMPLETION OF THE INSTABLE BY THE VARIOUS SUBCONTRACTORS.	THREE-WAY MODULATING CONTROL VALVE AUTOMATIC FLOW CONTROL VALVE SAFETY OR PRESSURE RELIEF VALVE PRESSURE REDUCING VALVE MANUAL AIR VENT TEST PLUG (PRESSURE/TEMPERATURE) BACKFLOW PREVENTER	GATE VALVE WITH 3/4" HOSE ADAPTER CHECK VALVE ANGLE GLOBE VALVE BUTTERFLY VALVE BALL VALVE BALANCING VALVE BALANCING VALVE CIRCUIT SETTER CIRCUIT SETTER STRAIGHT—THRU MODULATING CONTROL VALVE STRAIGHT—THRU TWO POSITION CONTROL VALVE	STORM DRAIN - BELOW GRADE STORM DRAIN - ABOVE GRADE WWR WR WELL WATER RETURN WELL WATER SUPPLY NON-POTABLE WATER EXISTING PLUMBING TO REMAIN EXISTING PLUMBING TO REMOVED VALVE SYMBOLS GATE VALVE	DEIONIZED WATER DOMESTIC COLD WATER DOMESTIC HOT WATER DOMESTIC HOT WATER (TEMP. INDICATED) DOMESTIC RECIRCULATING HOT WATER HARD DOMESTIC RECIRCULATING HOT WATER HARD COLD WATER OSD OVERFLOW STORM DRAIN - BELOW GRADE OVERFLOW STORM DRAIN - ABOVE GRADE REVERSE OSMOSIS WATER SANITARY VENT - BELOW GRADE SANITARY WASTE - BELOW GRADE SANITARY WASTE - ABOVE GRADE SOFTENED COLD WATER TEMPFERD WATER TEMPFERD WATER	REFRIGERANI LIQUID RS — REFRIGERANT SUCTION REFRIGERANT SUCTION REFRIGERANT HOT GAS REFRIGERANT SUCTION REFRIGERANT HOT GAS REFRIGERANT HOT GAS REFRIGERANT HOT GAS REFRIGERANT SUCTION REFRIGERANT SUCTION REFRIGERANT SUCTION REFRIGERANT SUCTION REFRIGERANT SUCTION REFRIGERANT HOT GAS RE	FAN POWERED VARIABLE VOLUME TERMINAL UNIT WITH HEATING COIL. PIPING SYMBOLS AIR CONDITIONING — CWIT — CONDENSER WATER TO TOWER — CWFT — CONDENSER WATER FROM TOWER — HWS — HOT WATER HEATING RETURN — CHS — CHILLED WATER SUPPLY — CHR — CHILLED WATER RETURN	ECC ENGINEERING CONTROL CENTER SYSTEMS OPERATIONS, CONNECTED TO ECC. DUCT SMOKE DETECTORS (FURNISHED AND WIRED TO ECC.) PRESSURE GAUGE AIR TERMINAL SYMBOLS CONSTANT VOLUME TERMINAL UNIT WITH HEATING COIL. LETTER INDICATES SIZE. DOUBLE DUCT MIXING BOX.
ALL DIMENSIONS SHOWN ON THESE PLANS AND SHALL BE RELD DIMENSIONS. WHERE VARIATIONS ARE FOUND TO OCCUR, R TO PROCEEDING WITH CONSTRUCTION; NO ADJUSTMENT TO TENGINEER. INCLUDING REMOVAL OF WALLS, PARTITIONS, DOORS & OR STRUCTURE SHALL BE THE GENERAL CONTRACTOR'S STRUCTURE FOR PIPING OR CONDUIT SHALL BE THE RESPECTIVE FOR PIPING OR CONDUIT SHALL BE THE RESPECTIVE BE DONE BY THE RESPECTIVE FING, AND/OR DRILLING IS THE RESPONSIBILITY OF THE INSTALLATION OF ANY AND ALL UTILITIES INSTALLED PHONE 612.465.7550 FAX 612.465.7551 WEB dunhameng.com mechanical + electrical consulting engineering project in numbers: 0414850-004-00	AIR CURTAIN UNIT HEATER (HORIZONTAL) UNIT HEATER (VERTICAL) 2' × 2' RADIANT CEILING PANEL 2' × 4' RADIANT CEILING PANEL	FLOOR MOUNTED VERTICAL RECESSED FAN COIL UNIT. A TWU THRU WALL AIR CONDITIONING UNIT. LETTER INDICATES UNIT SIZE. A HP FLOOR MOUNTED VERTICAL CABINET FAN COIL UNIT. LETTER INDICATES UNIT SIZE. WINDOW TYPE AIR CONDITIONING UNIT. LETTER INDICATES UNIT SIZE. FLOOR MOUNTED CABINET WATER TO AIR REVERSE CYCLE HEAT PUMP. LETTER INDICATES UNIT SIZE.	R PRESSURE REGULATOR TERMINAL UNIT SYMBOLS CONVECTOR OR RADIATOR (RECESSED) NUMBER INDICATES 1 MBH=THOUSAND BTUH. CONVECTOR OR RADIATOR (WALL HUNG) NUMBER INDICATES 1 MBH=THOUSAND BTUH.	CONTROL AIR MAIN ELECTRO-PNEUMATIC (EP) SWITCH CO HOLDING COIL IN MOTOR STARTER R2-A CONTACT, NORMALLY OPEN (N.O.) R2-B CONTACT, NORMALLY CLOSED (N.C.) SWITCH PILOT LIGHT (RED)	DUC: DUC: HYDI TEMP TEMP TEMP TEMP	CONTROLS SYMBOLS (T) (H) ROOM CONTROL: THERMOSTAT. HUMIDISTAT (T)—CONTROL: THERMOSTAT. HUMIDISTAT (T)—CONTROL: THERMOSTAT. HUMIDISTAT (T)—CONTROL: THERMOSTAT. HUMIDISTAT (T)—CONTROL: THERMOSTAT WITH AVERAGING ELEMENT. PROVIDE 12" (300 MM) MIN. LENGTH IN DUCT WHEN SPACE PERMITS. (T)—CONTROL: THERMOSTAT WITH AVERAGING ELEMENT (T)—CONTROL: THERMOSTAT WITH AVER	HEATING HIGH PRESSURE STEAM (60 PSIG AND ABOVE) HIGH PRESSURE STEAM CONDENSATE RETURN MEDIUM PRESSURE STEAM CONDENSATE RETURN (MPS) MEDIUM PRESSURE STEAM (16 PSIG THRU 59 PSIG) (MPS) MEDIUM PRESSURE STEAM (15 PSIG AND BELOW) LOW PRESSURE STEAM CONDENSATE RETURN (MPR) LOW PRESSURE STEAM CONDENSATE RETURN CONDENSATE PUMP DISCHARGE HOT WATER HEATING SUPPLY HOT WATER HEATING RETURN VENT LINF
TRUE NORTH Instruction of the table plan, specification, or specific from the part of the plan specification, or specific from the plan specific from the plan specific from the plan specific from the plan plan plan specific from the plan plan plan plan specific from the plan plan plan plan plan specific from the plan plan plan plan plan plan plan plan	STANDARD BRANCH SUPPLY OR RETURN, NO SPLITTER (45° TAP) RETURN DUCT MOUNTED COIL (HOT WATER OR STEAM COIL) AIRFLOW MEASURING STATION	SMOKE DAMPER STAINLESS STEEL DUCT OR OR MANUAL SPLITTER DAMPER MANUAL SPLITTER DAMPER	INCLINED RISE, IN DIRECTION OF AIR FLOW LIMIT OF DEMOLITION LIMIT OF DEMOLITION	SUPPLY TOP REGISTER OR GRILLE (WALL TYPE) EXHAUST OR RETURN CEILING REGISTER OR GRILLE (WALL TYPE) EXHAUST OR RETURN BOTTOM REGISTER OR GRILLE (WALL TYPE) VANED ELBOW & AIR SPLIT TYPE DUCT TAKE-OFF CONNECT NEW DUCT TO EXISTING DUCT	MANUAL VOLUME DAMPER FIRE DAMPER BACK DRAFT DAMPER UP DN SUPPLY DUCT (UP & DOWN) EXHAUST DUCT (UP & DOWN) CEILING DIFFUSERS	EXISTING DUCT TO BE REMOVED LOUVER (LOUVER SPECIFIED IN ARCHITECTURAL SECTION.) FLEXIBLE DUCTWORK (INSULATED) DUCT WITH SOUND LINING MOTORIZED DAMPER	FLEXIBLE CONNECTION FC VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING) VANED ELBOW (SHORT RADIUS) TOX8 NEW DUCT (WIDTH X DEPTH)
MECHANICAL TITLE SHEET I: Catherine Joyce, Chief, Projects Section Cocation V.A. None one one of the minner of t	DRAWING SYMBOLS DETAIL NUMBER DETAIL NUMBER WHERE DRAWN SECTION LETTER DRAWING NUMBER WHERE SHOWN TYPICAL UNIT NO. SUPPLY FAN NO.3 IN BUILDING NO.26 BUILDING NO. WHERE EQUIPMENT IS LOCATED. EQUIPMENT ABBREVIATION (SUPPLY FAN)	BLAST THERMOSTATIC TRAP INVERTED BUCKET TRAP SET INCLUDING PIPING ACCESSORIES FLOAT & THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES THERMOSTATIC TRAP STRAINER PRESSURE GAGE WATER FLOW MEASURING DEVICE EXISTING PIPE TO BE REMOVED EXISTING PIPE TO BE REMOVED	BOTTOM CONNECTION, 45° OR 90° SIDE CONNECTION CAPPED OUTLET RISE OR DROP IN PIPE UNION ORIFICE UNION POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK LIMIT OF DEMOLITION	CHALLENGE #6: SCHEDULING OF SOME PHASES WILL BE DEPENDANT ON SEASONAL WEATHER CONDITIONS (example: it would not be wise to perform surgery unit replacements during hot summer weather). EMERGENCY DEPARTMENT AHU #11 WILL BE FIRST PRIORITY WITH THE SURGERY UNITS TO QUICKLY FOLLOW (or occur simultaneously). CONTRACTOR TO PROVIDE OVERALL REPLACEMENT SCHEDULES, INCLUDING LEAD TIMES NEEDED FOR EQUIPMENT PROCUREMENT, WITH THEIR SUBMITTED BIDS FOR REVIEW. CENERAL SYMBOLS DIRECTION OF PIPE PITCH (DOWN) PREDUCER OR INCREASER ECCENTRIC REDUCER TOP CONTRACTOR AS: OF OR	WITHIN BID FORM TO BALANCE THE ENTIRE OR SUITE AS SHOWN ON DRAWING MH2.8 AND MH2.9. BALANCING FOR AH1NW-11 AND AH3NW-27 ARE MORE ABBREVIATED CHECKS OF DUCT MAINS AND RANDOM ROOMS, REFER TO DRAWINGS MH1.3 AND MH3.3 FOR SCOPE. CHALLENGE #4: DURING WEEKEND WORK WITHIN AH1NW-11 THERE WILL NEED TO BE TEMPORARY COOLING AND HEPA FILTRATION FOR THE EMERGENCY DEPARTMENT THAT WILL CONTINUE TO OPERATE 24/7 CONTINUOUSLY. VA HOSPITAL WILL FURNISH ALL PORTABLE COOLERS AND HEPA FILTERS BUT THE CONTRACTOR WILL BE EXPECTED TO ASSIST IN PLACEMENT OF THESE AND MANAGEMENT/COORDINATION OF SERVICE OUTAGE. SUBMIT PRELIMINARY SCHEDULES AND ANY OPPORTUNITIES TO REDUCE NUMBER OF INSTALLATION PHASES. CHALLENGE #5: ALL SERVICE OUTAGES SHALL ONLY OCCUR DURING WEEKEND HOURS STARTING AT 5:00 PM ON FRIDAY AFTERNOON, AND BACK TO NORMAL OPERATION BY 5:00 AM MONDAY MORNING. CONTRACTOR TO CONFIRM THAT ALL OUTAGES SHOWN ON THESE DRAWINGS (with exception to phase 1 of the surgery AHU's, see challenge #1 above). ANY CONCERNS, OR POTENTIAL SCHEDULE OUTAGE EXTENSION REQUESTS, SHALL BE INCLUDED WITH CONTRACTOR'S BID IN WRITING.	CHALLENGE #2: WHEN EXISTING AH2NW—19 IS CONNECTED TO TEMPORARILY BACKFEED ALL IT'S CURRENT AREAS, PLUS AREAS PREVIOUSLY SERVED BY AH2NW—20, THE SUPPLY FAN WILL BE STRETCHED BEYOND ITS CAPABILITIES. BALANCING CONTRACTOR WILL BE EXPECTED TO PUT IN ADDITIONAL EFFORT TO WORK CLOSELY WITH ENGINEER BY PROVIDING READINGS PRIOR TO SWITCHOVER AND COORDINATE ADJUSTMENTS TO THE BALANCING SCHEDULE. VA HOSPITAL SHOULD BE PREPARED TO POTENTIALLY LOSE AIRFLOW TO MULTIPLE OPERATING ROOM AREAS DURING THE ENTIRE PHASE 2 WHEN THE NEW AH2NW—20 IS BEING INSTALLED. CONTRACTOR WILL BE EXPECTED TO EXPEDITE PHASE 2 INSTALLATION TO REDUCE NUMBER OF WEEKS THAT THOSE OR'S COULD BE POTENTIALLY OUT OF SERVICE. INCLUDE ESTIMATED TIMEFRAME (in weeks) THAT PHASE 2 WOULD REQUIRE TO HAVE THE NEW AH2NW—20 INSTALLED AND READY TO BACKFEED ALL AREAS. CHALLENGE #3: EACH PHASE FOR THE SURGERY AHU'S REQUIRES CONTRACTOR SHOULD ASSUME TO PROVIDE MULTIPLE CREWS TO KEEP BALANCING EFFORTS BETWEEN OUTAGE AS SHORT AS POSSIBLE. PROVIDE BALANCING EFFORT TIMELINE (in hours between each phase)	ALL CONTRACTORS SHALL ACKNOWLEDGE THE PHASING RISKS IDENTIFIED WITHIN THE DOCUMENTS ON THEIR SUBMITTED BID FORM. CONTRACTORS WILL BE EXPECTED TO ATTEND MEETINGS, PROVIDE DETAILED CONSTRUCTION SCHEDULES, IDENTIFY MEANS AND METHODS TECHNIQUES TO MINIMIZE PATIENT DISRUPTION, AND HAVE ALL NECESSARY OVERTIME EFFORTS INCLUDED WITHIN THEIR BIDS. CONTRACTOR SHALL REVIEW ALL PHASING WITHIN THEIR BIDS. CONTRACTOR SHALL REVIEW AND PHASE 1 CONVERSION OF EXISTING AND VERTIME UNIT PRIOR TO BOCKFEEDING BOTH AREAS. THE WORK SHOWN TO INSTALL ALL TEMPORARY RETURN/EXHAUST DUCTWORK REQUIRED FOR THIS PHASE IS QUITE INTENSIVE FOR A 3-DAY WEEKEND OUTAGE, EVEN WITH WORKING CONSECUTIVE MULTIPLE SHIFTS CONTINUOUSLY ON OVERTIME. CONTRACTOR SHALL REVIEW AND PROVIDE PRELIMINARY WORK SCHEDULE WITH THEIR SUBMITTED BIDS TO VERIFY FEASIBILITY OF TIMELINE ALLOCATED.
FULLY SPRINKLERED FACILITIES FACILITIES Management	MAINLENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF VALVES, FILTERS AND STRAINERS, TRANSMITTERS, CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS TO THE COTR FOR RESOLUTION. 11. FIRE CAULK DUCT AND PIPE PENETRATIONS THROUGH INTERSTITIAL FLOOR DECK. 12. PROVIDE MINIMUM OF TWO WEEKS NOTICE TO CONTRACT OFFICER TECHNICAL REPRESENTATIVE (COTR) FOR EXISTING MECHANICAL/ELECTRICAL SYSTEM SHUT-DOWNS. 13. COORDINATE ANY INTERSTITIAL DECK REPAIR WITH GENERAL CONTRACTOR. 14. GENERAL CONTRACTOR TO PAY ATTENTION TO PHASING REQUIREMENTS IDENTIFIED THROUGHOUT THIS SET OF DRAWINGS AS MOST WORK WILL NEED TO BE PERFORMED DURING WEEKEND HOURS WITH ALL M/E SYSTEMS OPERATIONAL BEFORE 5AM MONDAY MORNING. 15. NOISE OR VIBRATION CAUSING ACTIVITIES WILL REQUIRE CLOSE COORDINATION WITH HOSPITAL WHEN PERFORMED DIRECTLY ABOVE, OR ADJACENT TO, SURGICAL AREAS. CD 100	3. ACCESS PANELS IN SUSPENDED CEILINGS SHALL BE PROVIDED FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. ACCESS PANELS SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. 4. TOTAL STATIC PRESSURE NOTED IN THE SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC. INCLUDE DIRTY FILTER ALLOWANCE FOR ALL FANS. 5. FOR TYPICAL STEAM AND WATER PIPING CONNECTIONS TO EQUIPMENT SEE STANDARD EQUIPMENT DETAILS. FURNISH ALL COMPONENTS INDICATED ON DETAILS AND SPECS. 6. DIFFUSER, REGISTER AND GRILLE SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES. 7. WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE TO PROVIDE COUNTER FLOW BETWEEN WATER AND AIR. 8. ALL PIPE AND DUCT HANGERS MUST ATTACH TO STEEL STRUCTURE OF INTERSTITIAL SPACE LIGHTWEIGHT CONC. DECK. 9. COORDINATE EXACT LOCATIONS OF CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH ENGINEER AND COR. DISCREPANCIES SHALL BE NOTED ON AS—BUILT DRAWINGS. 10. ALL TERMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, AND SERVICING.	BID OPTION #3 ALL CONTRACTORS WILL BE REQUESTED TO PRICE THE ENTIRE EFFORT FOR THE THIRD FLOOR ALL CONTRACTORS WILL BE REQUESTED TO PRICE THE ENTIRE EFFORT FOR THE THIRD FLOOR ALL CONTRACTORS WILL BE REQUESTED TO PRICE THE ITEM. ALL WORK ASSOCIATED WITH DRAWINGS M3.0, M3.1, M3.2, AND M3.3 SHALL BE INCLUDED WITHIN THIS ADD ALTERNATE FOR SEPARATE CONSIDERATION FROM THE REMAINDER OF THE PROJECT. COORDINATE IMPACT WITH ALL TRADES AFFECTED. BASE BID TO INCLUDE ALL OTHER WORK FOR THE REMAINING THREE(3) AIR HANDLERS. CENERAL NOTES OF THE FIRST FIGURE OF DIAMESTED CONNECTION AT PIPING LOW END POINTS SO EACH SYSTEM CAN BE THOROUGHLY DRAINED. PROVIDE AIR VENTS WITH MANUAL VENT VALVES AT PIPING HIGH POINTS SO AIR IN PIPING CAN BE THOROUGHLY PURGED. THE FIRST FIGURE OF DICT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.	COMPONENT REQUIREMENTS ALONG WITH COMPLETE BERAK-DOWN DELIVERY AND FULL ASSEMBLY ON SITE BY THE MECHANICAL CONTRACTOR. MANUFACTURER TO PROVIDE FULL DESCRIPTION OF ASSEMBLY SUPERVISION, AND FINAL UNIT TESTING, TO BE FURNISHED BY A FACTORY AUTHORIZED REPRESENTATIVE WITHIN THEIR PRICING QUOTATIONS FOR REVIEW. BID OPTION #2 1. MECHANICAL CONTRACTOR TO PROVIDE HAAKON CUSTOM AHU, WITH ACOUSTIFLO SUPPLY FANS, FOR AHZNW—19 AND AHZNW—20. REFER TO SPECIFICATION SECTION 237300 FOR DETAILS ON COMPONENT REQUIREMENTS ALONG WITH COMPLETE BREAK—DOWN DELIVERY AND FULL ASSEMBLY ON SITE BY THE MECHANICAL CONTRACTOR. MANUFACTURER TO PROVIDE FULL DESCRIPTION OF ASSEMBLY SUPERVISION, AND FINAL UNIT TESTING, TO BE FURNISHED BY A FACTORY AUTHORIZED REPRESENTATIVE WITHIN THEIR PRICING QUOTATIONS FOR REVIEW. YOLUNITARY BID OPTIONS FOR SECOND TIER MANUFACTURERS: 1. MECHANICAL CONTRACTOR, AT THEIR OPTION, MAY SUBMIT SECONDARY PRICING FROM ANY OF THE FOLLOWING MANUFACTURER'S BASED ONLY UPON THEIR OPINION OF BEST VALUE. 2. AINNOVENT AIR HANDLING EQUIPMENT B. CLIMATECRAFT, INC. ADDD ALTERNIA DATE (BID OPTION #3) NOTES:	21 OF 30 1293-70-MH3.2 3RD FLOOR MECHANICAL ROOM NORTHWEST MECHANICAL PLAN 22 OF 30 1293-70-MH3.3 3RD FLOOR MECHANICAL BALANCING PLAN 23 OF 30 1293-70-M4.0 MECHANICAL DETAILS 24 OF 30 1293-70-M4.1 MECHANICAL DETAILS 25 OF 30 1293-70-M4.2 MECHANICAL SCHEDULES 26 OF 30 1293-70-ME5.0 MECHANICAL AND ELECTRICAL SCHEDULES 26 OF 30 1293-70-ME5.0 MECHANICAL AND ELECTRICAL SCHEDULES BID OPTION #1 1. MECHANICAL CONTRACTOR TO PROVIDE VENTROL CUSTOM AHU, WITH FANWALL SUPPLY FANS, FOR AH2NW-19 AND AH2NW-20. REFER TO SPECIFICATION SECTION 237300 FOR DETAILS ON	11 OF 30 1293-70-MH2.2 2ND FLOOR MECHANICAL ROOM NORTHWEST DEMOLITION PLAN 12 OF 30 1293-70-MH2.3 2ND FLOOR MECHANICAL ROOM NORTHWEST MECHANICAL PLAN 13 OF 30 1293-70-MH2.4 2ND FLOOR MECHANICAL DEMOLITION PLAN 14 OF 30 1293-70-MH2.5 2ND FLOOR INTERSTITIAL MECHANICAL PLAN 15 OF 30 1293-70-MH2.7 2ND FLOOR INTERSTITIAL MECHANICAL DEMOLITION PLAN 16 OF 30 1293-70-MH2.8 2ND FLOOR MECHANICAL AH2NW-19 BALANCING PLAN 18 OF 30 1293-70-MH2.9 2ND FLOOR MECHANICAL AH2NW-20 BALANCING PLAN 19 OF 30 1293-70-MH3.0 70-AH3NW-27 AIR HANDLER 27 MECHANICAL PLANS 20 OF 30 1293-70-MH3.1 3RD FLOOR MECHANICAL ROOM NORTHWEST DEMOLITION PLAN	DWG SHEET ORDER SHEET SHEET TITLE 4 OF 30 1293-70-M1.0 MECHANICAL TITLE SHEET 5 OF 30 1293-70-MH1.1 1ST FLOOR MECHANICAL ROOM NORTHWEST DEMOLITION PLAN 7 OF 30 1293-70-MH1.2 1ST FLOOR MECHANICAL ROOM NORTHWEST MECHANICAL PLAN 8 OF 30 1293-70-MH1.3 1ST FLOOR MECHANICAL BALANCING PLAN 9 OF 30 1293-70-MH2.0 70-AH2NW-19 AIR HANDLER 19 MECHANICAL PLANS 10 OF 30 1293-70-MH2.1 70-AH2NW-20 AIR HANDLER 20 MECHANICAL PLANS